

## REMARKS/ARGUMENTS

In the Advisory Action dated July 9, 2004, the Examiner has noted that the Applicant has argued that *Augusteijn et al.* pertains to native instructions (Advisory Action, page 2). Contrary to the Examiner's assertion, it is very respectfully submitted that Applicant has argued that *Augusteijn et al.* pertains to converting virtual machine instructions into native instructions (After Final Amendment dated May 26, 2004, page 9). Clearly, converting virtual machine instructions into native instructions does NOT teach or even remotely suggest: converting a stream of virtual machine commands and data associated with the virtual machine commands into a pair of streams for use in the virtual machine (see, for example, claim 1).

The Examiner has also noted in the Advisory Action that the claimed invention does not exclude native instructions, therefore, the Applicant's argument is moot (Advisory Action, page 2). It is very respectfully submitted that the Applicant is neither claiming a native instruction, nor arguing that that *Augusteijn et al.* does NOT teach a virtual machine instruction. Rather, the Applicant has respectfully submitted that *Augusteijn et al.* does NOT teach or suggest the recited feature of: converting a stream of virtual machine commands and data associated with the virtual machine commands into a pair of streams for use in the virtual machine (see, for example, claim 1). In addition, the Applicant has argued that *Augusteijn et al.* does NOT teach or suggest writing a representation of a first command associated with a first instruction into a code entry of the code stream, determining whether the first command has data associated with it, or writing a representation of the associated data or a reference to a representation of the data associated with the first command into a first data entry of the data stream when the command has associated data (claim 4). Furthermore, it has been argued that *Augusteijn et al.* does NOT teach or suggest fetching a command associated with a virtual machine computer instruction from a code stream, and fetching from a data stream the associated parameter of the command when it is determined that the command has an associated parameter (claim 16). Still further, it has been argued that *Augusteijn et al.* does NOT teach or suggest processing data from a constant pool and writing a representation (or a reference) of the data in the code

stream (claim 22). Finally, it has been argued that *Augusteijn et al.* cannot possibly teach or suggest the combination of recited features of claim 29. These arguments have also been reproduced below for the Examiner's convenience.

Again, it is earnestly believed that that distinction between *Augusteijn et al.* and the claimed invention are evident because, among other things, *Augusteijn et al.* does not teach or suggest a virtual machine code stream and a virtual machine data stream. Rather, *Augusteijn et al.* pertains to conversion of program specific virtual machine instructions into native instructions (*Augusteijn et al.*, Abstract).

Accordingly, the Applicant earnestly believes that the distinction between the claimed invention and *Augusteijn et al.* are clearly apparent. Nevertheless, claim 1 and 3 have been amended to even further clarify that the subject matter regarded as the invention. The Applicant also earnestly believes that filing a request for continuation rather than a Notice of Appeal would give the Applicant an opportunity for an interview with the Examiner.

Claims 1-30 are pending. In the Final Office Action, the Examiner withdrew the rejection of claims under 35 U.S.C. §112. However, the Examiner has maintained the rejection of claims 1-9 and 11-21 under 35 U.S.C. §102 over U.S. patent No. 6,292,883 B1 (*Augusteijn et al.*). This rejection is fully traversed below.

The applicant respectfully reiterates the arguments which were presented in the amendment dated January 13, 2004. Accordingly, it is respectfully submitted that all pending claims are patentable over U.S. patent No. 6,292,883 B1 (*Augusteijn et al.*). Nevertheless, claim 1 has been amended to further clarify the subject matter regarded as the invention.

In the Final Office Action, the Examiner has asserted that *Augusteijn et al.* teaches converting a stream of commands and data associated with the commands into a pair of streams in the context of the invention (Final Office Action, page 8, paragraph 11). The Applicant respectfully disagrees.

Again, it should be noted that *Augusteijn et al.* pertains to converting virtual machine instructions into native instructions (*Augusteijn et al.*, Abstract). It is respectfully submitted that converting a virtual machine instruction into native instructions does NOT teach or suggest converting a virtual machine instruction into a virtual machine code and a data stream, such that the code stream includes the virtual

machine commands and the data stream includes the data associated with the virtual machine commands. Clearly, *Augusteijn et al.* does NOT teach or suggest converting a virtual machine instruction itself into a pair of streams (e.g., a code and a data stream). This distinction is believed to be evident because, among other things, the methodology taught by *Augusteijn et al.* pertains to defining and converting a program-specific virtual machine instructions into native instructions of a core 114 (*Augusteijn et al.*, Abstract).

More particularly, it is noted that *Augusteijn et al.* states that to enable conversion of “further” virtual machine instructions into native instructions conversion data is received. It is also noted that *Augusteijn et al.* states that to be able to select the appropriate conversion means during execution, “selection” data is stored in a processing unit associated with each “further” virtual machine (*Augusteijn et al.*, Col 12, line 1-15). However, it is respectfully submitted that the conversion and selection data are used to facilitate the conversion of “further” virtual machine instructions into native instructions. This data, however, is not used for converting the virtual machine into virtual machine code and data. Also, it is respectfully submitted that “matching up” the selection data with a virtual machine does NOT teach or even remotely suggest converting a virtual machine instruction into a code and a data stream, such that the code stream includes the virtual machine commands and the data stream includes the data associated with the virtual machine commands. The operations described in *Augusteijn et al.* are also performed in the context of converting virtual machine instructions into native instructions (*Augusteijn et al.* Col. 12, lines 1-15). Accordingly, it is respectfully submitted that claims 11, 11 and 21 are patentable over *Augusteijn et al.* for at least these reasons.

In addition, it is respectfully submitted that the dependent claims recite additional features which render them patentable for additional reasons. For example, claim 4 recites writing a representation of a first command associated with a first instruction into a code entry of the code stream, determining whether the first command has data associated with it, and writing a representation of the associated data or a reference to a representation of the data associated with the first command into a first data entry of the data stream when the command has associated data. As noted above, *Augusteijn et al.* does NOT teach or suggest a virtual machine code stream and a virtual machine data stream in a virtual machine. Hence, *Augusteijn et al.* cannot possibly teach or suggest the features.

Furthermore, it is respectfully submitted that *Augusteijn et al.* does NOT teach or suggest fetching a command associated with a virtual machine computer instruction from a code stream, and fetching from a data stream the associated parameter of the command when it is determined that the command has an associated parameter (claim 16).

Still further, *Augusteijn et al.* does NOT teach or suggest processing data from a constant pool and writing a representation (or a reference) of the data in the code stream (claim 22).

Finally, it is respectfully submitted that *Augusteijn et al.* cannot possibly teach or suggest the combination of recited features of claim 29. Again, it is earnestly believed that that distinction between *Augusteijn et al.* and the claimed invention are evident because, among other things, *Augusteijn et al.* does not teach or suggest a virtual machine code stream and a virtual machine data stream. Rather, *Augusteijn et al.* pertains to conversion of program specific virtual machine instructions into native instructions.

Based on the foregoing, it is submitted that claims 1-30 are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed because the limitations discussed above are sufficient to distinguish the claimed invention from the cited art. Accordingly, Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 500388 (Order No. SUN1P814). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
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